

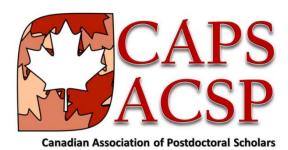
8:30am - 10:00am

# Where the rubber meets the road: The real life impact of policy on Canadian postdocs

Panel Organizer: Joseph S. Sparling Canadian Association of Postdoctoral Scholars

#### Where the Rubber Meets the Road: The Real-Life Impact of Policy on Canadian Postdoctoral Scholars

Friday, November 9th, 2018







Association Canadienne des Stagiaires Post-doctoraux



Social Sciences and Humanities Research Council of Canada Conseil de recherches en sciences humaines du Canada

#### **Session Overview**

| Time   | Event  |
|--------|--|
| 13 min | Presentation #1 The Canadian Postdoctoral Training System (JS Sparling)  |
| 12 min | Presentation #2 Stories from the Front Line: The Challenges Facing Canadian Postdocs (K Hegde)   |
| 45 min | Presentation #3 Where the Rubber Meets the Road: Panel Discussion on Solutions to Improve the Canadian Postdoctoral Experience Presenter/Moderator: J Haverfield Panelists: R Fernandez, D Bérubé, JS Sparling |
| 20 min | Question Period  |







### THE 2016 CANADIAN NATIONAL POSTDOCTORAL SURVEY REPORT







Jadavji NM, Adi MN, Corkery TC, Inoue J, Van Benthem, K. (2016). *The 2016 Canadian National Postdoctoral Survey Report.* CAPS/ACSP.

www.caps-acsp.ca





### The Canadian Postdoctoral Training System

Joseph S. Sparling





#### What's a Postdoc?

















A postdoc is an individual with a doctoral degree (or medical professional equivalent) holding a temporary position that is primarily designed to provide mentorship and advanced training for a career as an independent researcher and/or a faculty member in academia.



#### Postdoc Training: Intention vs. Reality

The postdoc position was originally intended to be a brief period of training after a PhD to prepare people for tenure-track research faculty positions.

#### Over time...

Increased reliance on postdocs and PhDs as low-cost labour to drive academic research

"...there are not enough faculty positions for the number of postdocs either....it is a serious problem and is directly related to me leaving Canada for an academic position in the United States." –Survey Respondent

ositions relative to number of trainees ing p

"Limited opportunity for tenure track positions- competition is too fierce, and you need to have multiple postdocs to even be considered." –Survey Respondent

CAPS/ACSP 2016 National Postdoc Survey





#### Postdoc Training: The Reality Today

Lengthening of postdoc training times

- More 'training time' required to become competitive for faculty positions
- Up to 8 years of training and 20+ publications is the norm in some fields

<20% of current postdocs are likely to attain tenure-track faculty positions

(Edge & Munro, 2015)





#### The Aging of the Postdoc Population



















- Average age = 34 years old
- 2/3 married
- 1/3 have children (50% ≥2 kids)
- Adult / family oriented life stage:
  - Settling down
  - Buying houses
  - Staring/planning families
  - Saving for retirement

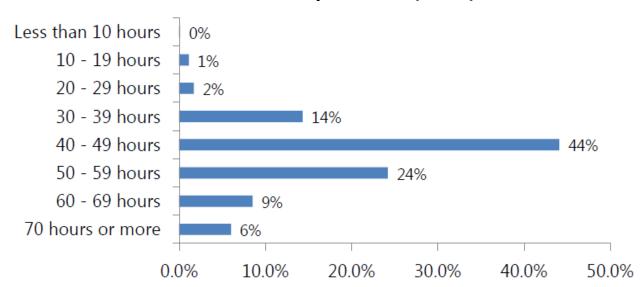
CAPS/ACSP 2016 National Postdoc Survey





#### **Hours Worked and Compensation**

#### Hours worked per week (2016)



#### **Canadian Postdocs:**

>40 hrs/week 83% >50 hrs/week 39% >60 hrs/week 15%

Average FT employee (25 yrs+) in Canada: 39.3 hrs/week\*

| •                   | Canadian-funded postdocs in Canada |          | Canadian postdocs working abroad |
|---------------------|------------------------------------|----------|----------------------------------|
| Est. average annual | \$46,600                           | \$55,500 | \$54,000                         |
| income (CAD\$)      | (47% <\$45,000)                    |          |                                  |

CAPS/ACSP 2016 National Postdoc Survey

\*Jan-Aug 2016 Labour Force data (StatsCan)





#### Foregone Wages for Canadian-trained Postdocs

Ferguson & Wang, 2014 – Labour market outcomes for Canadian PhDs

Est. gross annual earnings of 2009-2010 grads working FT in 2013

|                                    | Master           | Doctorate        | Doctorate-<br>working<br>in post-<br>doctorate<br>position | Doctorate-<br>working<br>in a non post-<br>doctorate<br>position | Foregone wage<br>during postdoc |
|------------------------------------|------------------|------------------|--|--|---------------------------------|
| _                                  | dollars          |                  |  |  | training:                       |
| Percentile 25 <sup>th</sup> Median | 54.000<br>70,000 | 57,000<br>75,000 | 45,000<br>50,000   | 65.000<br>82,000   | \$32,000 / year                 |
| Percentile 75th                    | 88,000           | 96,000           | 63,000   | 100,000  | , s = , s = s = , f = s = .     |
| CAPS/AC                            | CSP 2016         | Median           | \$47,500<br>Current  | <b>\$75,000</b> Former   | \$27,500 / year                 |
| National Pos                       | stdoc Survey     |                  | postdoc<br>in Canada                                       | Canadian<br>postdoc  |                                 |





#### Labour Market Outcome for Canadian-trained Postdocs

|                   | PhD holder<br>(No Postdoc Training)     | Former Postdocs<br>(n=479; CAPS' 2016 Survey) |
|-------------------|---|---|
| Unemployment rate | <b>4%</b> (Edge & Munro, 2015)          | 9%  |
| Annual income     | <b>\$82,000</b> (Ferguson & Wang, 2014) | \$75,000                                      |

#### **Cumulative earnings:**

No evidence that former postdocs trained in Canada ever surpass (or even catch up to) the average Canadian PhD graduate who goes straight into the workforce

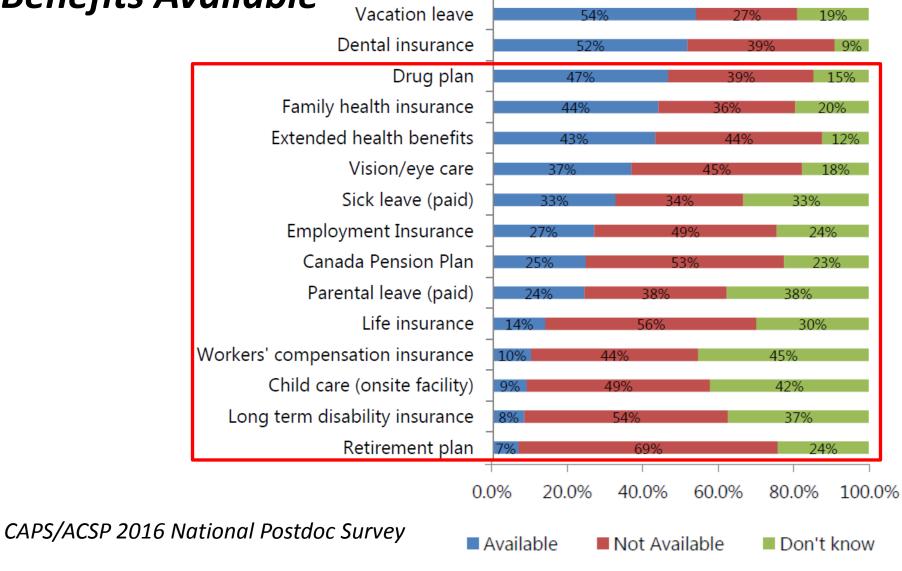
#### **TAKEHOME:**

No evidence of a labour market advantage for postdoc training





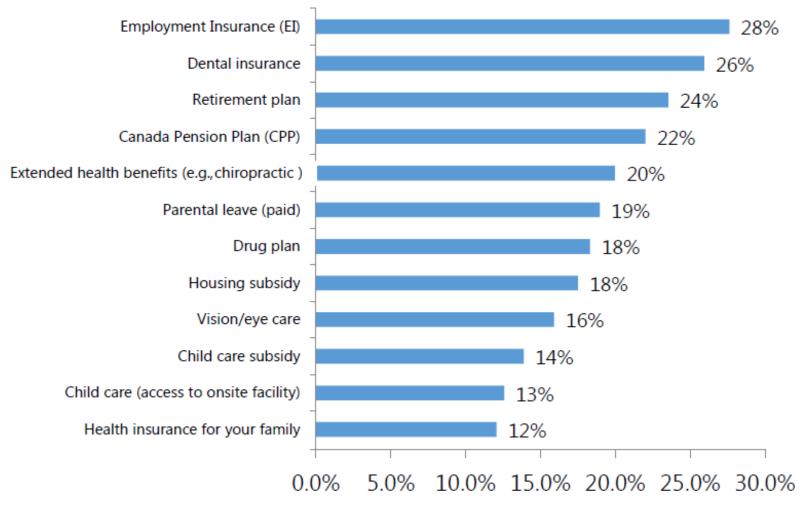
#### Benefits Available







#### "Top 3" benefits desired among postdocs



CAPS/ACSP 2016 National Postdoc Survey





#### The True Cost of Training for Postdocs in Canada

#### **Foregone Wages**

#### **Lost Retirement Income**

| Duration of postdoc | Foregone<br>wages | Duration of postdoc | Lost CPP retirement income/yr | Lost CPP<br>income from<br>65-85 years |
|---------------------|-------------------|---------------------|-------------------------------|--|
| 1 year              | \$30,000          | 1 year              | \$300                         | \$6,000                                |
| 2 years             | \$60,000          | 2 years             | \$600                         | \$12,000                               |
| 3 years (median)    | \$90,000          | 3 years (median)    | \$900                         | \$18,000                               |
| 4 years             | \$120,000         | 4 years             | \$1,200                       | \$24,000                               |
| 5 years ("max")     | \$150,000         | 5 years ("max")     | \$1,500                       | \$30,000                               |

**Estimated Cost Due to Lack of Health/Dental Benefits: \$2,000/year per household\*** 

(\*estimate based on Sanmartin et al., 2014 assuming household income at or below median in Canada)





#### The True Cost of Training for Postdocs in Canada

Assuming 3 years of postdoc training without employee status

| Lost wages (~\$30k/year) | \$90,000  |
|--------------------------|-----------|
| Lost retirement income   | \$18,000  |
| Health/dental expenses   | \$6,000   |
| Total                    | \$114,000 |



#### **Employment Status of Postdocs in Canada**

#### The 'Average' Postdoc

- 2016 Survey data: ~30% of postdocs estimated to be employees
- 2018 Update: 'Average' postdoc in Canada now an employee?
  - Unionization → internally-funded postdocs now employees at most universities
  - Majority of postdocs in Canada are "internally-funded" (range 50-85%)

#### **Externally-funded postdocs (fellowship-holders)**

- Largely denied employee status
- Few exceptions employer expenses often deducted from postdoc \$

#### **Government Labs also continue to deny postdocs employee status**

- Government labs hire postdocs ('visiting fellows') to conduct research
- 2012 CRA ruled a visiting fellow with federal funding was an employee
- Not yet implemented by all government labs





### Stories from the Front Line: The Challenges Canadian Postdocs Facing

Krishnamoorthy Hegde





#### Postdoc Salaries / Stipends

#### **The Impact of Taxation**

- All postdoes pay full federal income tax
- Most postdospenayl Julyenrovinscindy in the tax (except externally-funded/international postdocs in the lying after high school, and
- Most postdoc takedneneinsteesax than \$4th 000/year. Sometimes less than a graduate student with Vanier scholarship (\$351000 ataxla free)

#### Lack of Recognition of Years of Training/Experience

- Failure to acknowledge the value of the training and experience
- No set minimum pay in grant funds
- No guidelines for increasing pay with years of training
- Such schemes are supported by agencies in other countries (e.g., NIH)

#### Wage disparity is rampant in the Canadian Postdoc Training System

- Gross annual income for full time postdocs in Canada varies by >50%
- Minimum income standards \(\leq \\$40,000/\) year are common
- Maximum income standards generally lacking (some exceptional external awards)
- Pay of two postdocs who largely do the same work in the same lab may vary by >50%
- Fellowship holders are commonly forced to take a cut in pay once their fellowship expires





#### Trainee vs. Employee – Academia's Dilemma

Included as insurable employment under current El Regulations (SOR-96-332):

**6** Employment in any of the following employments, unless it is excluded from insurable employment by any provision of these Regulations, is included in insurable employment:

(a) employment of a union member by the member's union in conducting union business, other than picketing in a labour dispute;

**(b)** employment of a person as an apprentice or trainee, notwithstanding that the person does not perform any services for their employer;

(c) employment of a person as a member of the clergy or as a member of a religious order;

(d) employment of a person in a barbering or hair-dressing establishment, where the person

(i) provides any of the services that are normally provided in such an establishment, and

(ii) is not the owner or operator of the establishment;

EI Regulations literally state the

opposite opp

ut risk of being denied access to

d/or funding for training?

atus are not mutually exclusive

state the opposite...

This is common knowledge today in most sectors of the workforce – academia is behind the times

Current to March 18, 2018
Last amended on December 3, 2017





### External Award Holders vs. The Average Postdoc What's wrong with this picture?

#### **Average Canadian Postdoc**

- The average postdoc has access to
   Internally-funded
- benefits but external award holders

   Full federal & provincial

  (arguably the best and the income tax

  brightest') do not.
- Employee status
  - Access to EI benefits & CPP
- Union member
  - Access to health/dental
  - Access to other employeestyle benefits & pensions
  - Bargaining rights

#### **External Award Holders**

Situation making some postdocs

- · Award from funding agencies al
- Full federal Spprovincial?? income tax (except in QC)
- Trainee status
  - No access to EI/CPP
  - Maternity / parental leave only if provided by funding body
- Excluded from unions
  - Mostly, no such 'employee' benefits
  - No bargaining rights





#### Maternity & Parental Leave

#### Access to paid parental leave depends on source of funding "I am very grateful for the four

- Imterrhally finader hit ystewes from the
- •TEmployeeil, Yead to were dt by a Elbeen
- Trained to Uprtoinstitution hoppegvisor / funding NSTER COMPSEE FILE CRARGE FINE TRANSPORT THE CRA
- Externally funded the stdecs ear that
- Personal letter RE: CAPS' • Trainees only the typically no, gutess provided by funding body
  • No recourse – ELCPP Ruling precedence not in favour EI/CPP Rulings post

#### Why coverage provided by institutions/funding agencies in lieu of EI is not ideal

- Postdoc contract ends just before birth of child unlikely to get a renewed contract so no paid leave
- 6 months at full pay people need longer to adjust and get comfortable with their child

#### **Family Planning**

- Very difficult for someone on a short-term contra
- Postdocs who want children forced to take other je

leave

"Your words made tears

stream down my face. Thank

you for listening to our

stories."





#### Health/Dental Benefits

E.g., A university in western
Canada recently stripped
guaranteed health/dental benefits
from some external award-holders

who were previously provided Access to health/dental benefits is highly variable those benefits

- Employee status
- Source of funding
- External-funding delivery mechanisms
- Supervisors, Gürrent contracts that guarantee benefits negotiation
- Collective bargaining in future
  - No consultation or even proper notification made to postdocs
  - Decision made to guard against potential employee status rulings by the CRA





#### Health/Dental Benefits

#### Access to health/dental benefits is highly variable

- Employee status
- Source of funding
- External-funding delivery mechanisms
- Supervisors' whims or available funding
- Collective bargaining

#### **Impact**

- Many postdocs and supervisors unaware until contract renewal
- Future postdocs are unlikely to know that they can negotiate benefits
- Postdoc parents will have to negotiate health/dental coverage for their families
- Postdocs with existing medical conditions difficult situation to cover regular medical expenses





#### Vacation Time

#### Work more than the average Canadian

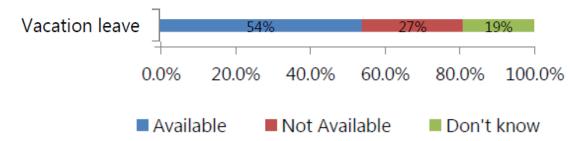
- >1/4 do not have access to paid vacation leave
- Increased mental and emotional stress
- Increased burnout and dissatisfaction
- Example
- Institutions / funding agencies with no clear policy around paid vacation time
- Some agency's fellowship policies prohibit paid leave entirely

#### Impact on real life

• Expected to request permission for any time physically away



- Any time away from workplace that is not work related is added to the end of the fellowship
- Failure to disclose funding may be cancelled and/or recalled







#### Mental Health

#### **Issues**

- Lack of benefits to cover counselling/ wellness support
- Lack of access to oncampus support
- Lack of attention to root issues

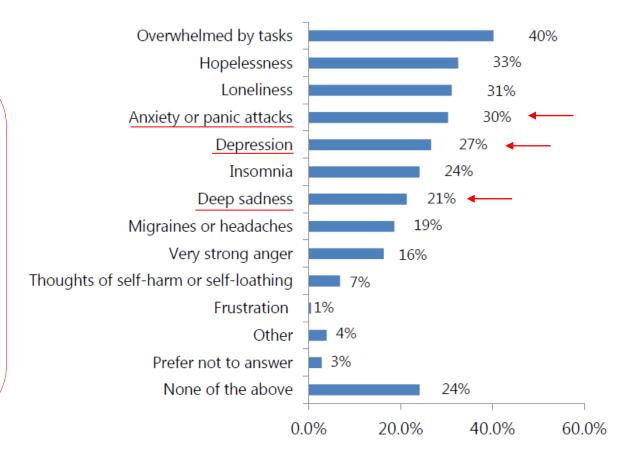


Figure 4.3.1. Mental health experience of all respondents during their postdoctoral training. Symptoms experienced for more than a month at a time.

CAPS/ACSP 2016 National Postdoc Survey





#### Peripheral Support

"Caitlin" – support in conflict

"Jim" – transitioning out of academia

An externally-funded postdoc

An internally-funded postdoc

Ended with her being fired / cancelling her award / barring her from teaching during their 'dispute'

PI ran out of \$ –fired with minimal notice

No process in place to defend

Little support available for career development

When she tried – closed door meetings with admin and the university

Could not find a job – ended working at a local retail store

Ombudsperson refused to accompany/offer any advice or help

Moved up to manager quite quickly

Her only options – seek an EI/CPP Ruling from the CRA/hire a lawyer

Happy with his job - making more than he did as a postdoc





#### Career Development

"Professional development,

- Less than 20% tenure-track career is REALLY lacking" faculty positions survey Respondent
- Vast majority must find alternative careers
- Only 16% of postdocs have access to professional career counselling

"[I am] incredibly
discouraged at the state of
career development and skill
development for postdocs
exposure,
with my PI/mentor and
institution"

Somewhat
exposed,
47%

Figure 3.2.4

C

non-academic career opportunities.

**Vational Postdoc Survey** 

\*Edge & Munro, 2015





## Where the Rubber Meets the Road: Panel Discussion on Solutions to Improve the Canadian Postdoctoral Experience

Jenna Haverfield



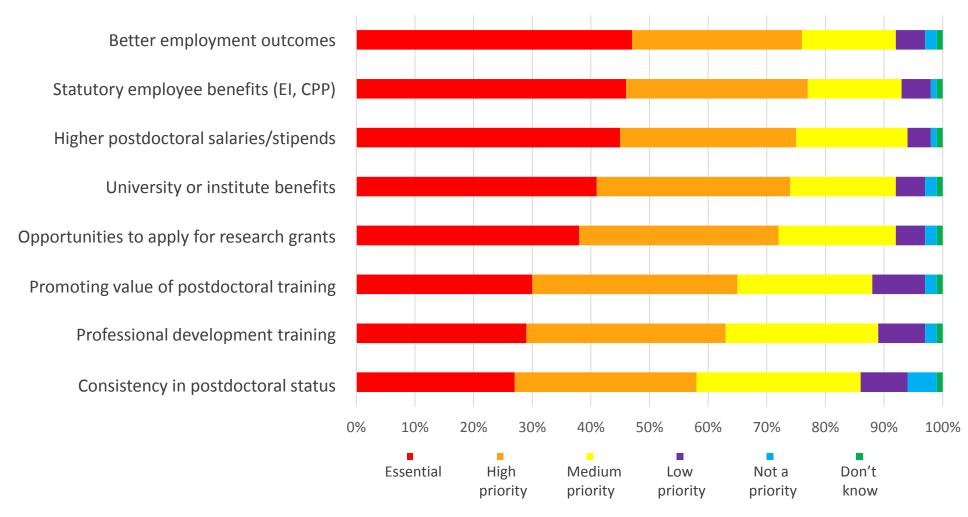


## Common Barriers to Postdoctoral Recruitment & Retention in Canada





#### What Canadian Postdocs Want to Change



CAPS/ACSP 2016 National Postdoc Survey





#### What Postdocs Want to Change

"During my postdoctoral fellowship, I found there was a significant difference in the experiences of externally funded postdocs (like myself) and those who were formally university employees and had access to benefits and so on... "

—Survey Respondent

"Postdocs should be eligible for EI benefits and make contributions to EI and CPP. This is the issue that I find most disconcerting among those listed.'—Survey Respondent

"I hope the government can really help to make the working status of postdoctoral fellows clear - so that we could have employment insurance --something very important for female researchers."

-Survey respondent

CAPS/ACSP 2016 National Postdoc Survey





#### **Identifying the Underlying Policy Issues**



- Lack of minimum standards & uniform national/ provincial policies pertaining to all postdocs.
- Lack of oversight regarding postdoc employment status at institutions and government laboratories.
- Lack of funding or other incentives for institutions to adopt more supportive policies.



#### **Panel Discussion**

Dr. Dominique Bérubé



SSHRC = CRSH

Social Sciences and Humanities Research Council of Canada
Conseil de recherches en sciences humaines du Canada

**Dr. Rachel Fernandez** 





**Dr. Joe Sparling** 









#### Recommendation #1:

## Monitor the Postdoctoral Training System & Track Outcomes





## Recommendation #2: Establish Minimum Standards of Postdoctoral Support



## Recommendation #3: Classify All Postdoctoral Scholars Working in Canada as Employees





## Recommendation #4: Establish a Uniform National Policy on Postdoctoral Training







